

Title (en)
Fluid level detection system

Title (de)
Flüssigkeitsstanderfassungssystem

Title (fr)
Système de détection de niveau de liquide

Publication
EP 2601919 A3 20130619 (EN)

Application
EP 13157797 A 20101112

Priority
• US 61747209 A 20091112
• EP 10779644 A 20101112

Abstract (en)
[origin: US2011112472A1] A medical device fluid sensing system is provided. The system includes a transmitter array positioned in association with a fluid maintaining device, such as a reservoir in a cassette. Electrical circuitry is connected to the transmitter array and configured to cause the transmitter array to transmit light energy at a predetermined wavelength and producing a desired absorption coefficient based on expected conditions within the fluid maintaining device. The system also includes a receiver array configured to receive light energy transmitted through the fluid maintaining device and originating from the transmitter array, and a controller configured to determine fluid level in the fluid maintaining device based on conditions sensed by the receiver array. In one embodiment, three transmitters and three matching sensors are provided in a surgical cassette, and when optical energy having predetermined characteristics is provided to the transmitter array, the presence or absence of fluid is determined.

IPC 8 full level
A61F 9/007 (2006.01); **A61M 35/00** (2006.01); **A61M 37/00** (2006.01)

CPC (source: EP US)
A61F 9/00736 (2013.01 - EP US); **A61M 5/16804** (2013.01 - US); **A61M 5/172** (2013.01 - US); **A61M 37/0092** (2013.01 - EP US); **A61M 2205/3306** (2013.01 - US); **A61M 2205/3379** (2013.01 - US); **A61M 2205/3389** (2013.01 - US); **G01F 23/292** (2013.01 - US); **G16H 20/17** (2017.12 - US); **Y02A 90/10** (2017.12 - EP)

Citation (search report)
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• [A] DE 10039765 A1 20020228 - VOLKSWAGEN AG [DE]
• [A] EP 0777111 A1 19970604 - ALCON LAB INC [US]
• [A] EP 1873501 A1 20080102 - ALCON INC [CH]
• [A] WEBER P: "OPTISCHER SENSOR MISST FUELLSTAENDE IN GLASROHREN", FEINWERKTECHNIK + MESSTECHNIK, HANSER, MUNCHEN, DE, vol. 99, no. 1 / 02, 31 January 1991 (1991-01-31), pages 31 - 33, XP000218121, ISSN: 0340-1952

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 2011112472 A1 20110512; US 8876757 B2 20141104; AU 2010319391 A1 20120614; AU 2010319391 B2 20150205; CA 2780745 A1 20110519; CA 2780745 C 20191001; CA 3027210 A1 20110519; EP 2498738 A1 20120919; EP 2498738 B1 20150401; EP 2498738 B8 20150506; EP 2601919 A2 20130612; EP 2601919 A3 20130619; EP 2601919 B1 20140618; US 10327948 B2 20190625; US 2015025446 A1 20150122; WO 2011060208 A1 20110519; WO 2011060208 A8 20120614

DOCDB simple family (application)
US 61747209 A 20091112; AU 2010319391 A 20101112; CA 2780745 A 20101112; CA 3027210 A 20101112; EP 10779644 A 20101112; EP 13157797 A 20101112; US 2010056436 W 20101112; US 201414507606 A 20141006